

United States Patent [19]

Uchino et al.

[11] Patent Number: 4,649,197

[45] Date of Patent: Mar. 10, 1987

[54] SULFATE OF
5,6,7,8-TETRAHYDRO-L-ERYTHRO-BIOPT-
ERIN AND PROCESS FOR PREPARING THE
SAME

[75] Inventors: Hayashi Uchino, Ako; Masaaki
Azuma; Takehisa Ohashi, both of
Kobe; Kiyoshi Watanabe, Akashi, all
of Japan

[73] Assignee: Kanegafuchi Kagaku Kogyo
Kabushiki, Osaka, Japan

[21] Appl. No.: 712,813

[22] Filed: Mar. 18, 1985

[30] Foreign Application Priority Data

Mar. 24, 1984 [JP] Japan 59-56584

[51] Int. Cl.⁴ C07D 475/04

[52] U.S. Cl. 544/258

[58] Field of Search 544/258

[56] References Cited

U.S. PATENT DOCUMENTS

3,468,886 9/1969 Mosher 544/258
4,540,783 9/1985 Viscontini 544/258
4,595,752 6/1986 Azuma 544/258

FOREIGN PATENT DOCUMENTS

0487930 11/1952 Canada 544/258

OTHER PUBLICATIONS

Matsuura Chemical Abstracts, 101:130486c, (1984).
S. W. Baily et al, *J. Biological Chem.*, 253, 1598 (1978).
Matsuura et al, *J. Biochem.* 87, 951 (1980).
M. Viscontini et al, *Helveta Chim. Acta*, 65, 1090 (1982).

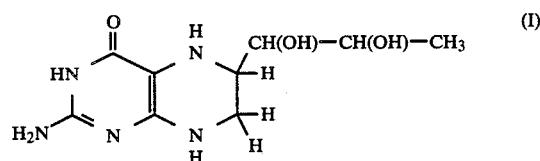
Primary Examiner—Robert J. Warden

Assistant Examiner—Robert Benson

Attorney, Agent, or Firm—Armstrong, Nikaido,
Marmelstein & Kubovcik

[57] ABSTRACT

A sulfate of tetrahydrobiopterin having the formula (I):



and a process for preparing the same, which comprises crystallizing tetrahydrobiopterin from an aqueous medium containing sulfuric acid. The sulfate of the (6R)-form of (I) has a high crystallinity and the process easily gives a sulfate of the (6R)-form.

10 Claims, 5 Drawing Figures